

ABSTRACT

Straight, nano-scale-order amorphous carbon tubes having a long-term stable ability for storing 5 various kinds of gases and being stable in shape, and a novel process for producing said carbon tubes with high purity, high yield and high mass-productivity are provided.

The amorphous nano-scale carbon tubes are prepared by subjecting a heat-decomposable resin having a 10 decomposition temperature of 200 to 900°C to an excitation treatment in the presence of a metal powder and/or a metal salt, or by subjecting a carbon material containing $-C\equiv C-$ and/or $=C=$ to a heat-treatment at 3000°C or lower.